

## **ABSTRACT OF THE DISCLOSURE**

Systems and methods are described for individually electrically addressable carbon nanofibers on insulating substrates. A method includes forming an electrically conductive interconnect on at least a part of an insulating surface on a substrate; and growing at least one  
5 fiber that is coupled to the electrically conductive interconnect. An apparatus includes an electrically conductive interconnect formed on at least a part of an insulating surface on a substrate; and at least one fiber coupled to the electrically conductive interconnect. A kit includes a substrate having an insulating surface; an electrically conductive interconnect formed on at least a part of the insulating surface; and at least one fiber coupled to the  
10 electrically conductive